

# Notice of Allowability

Application No.

10/812,800

Examiner

Derek L. Dupuis

Applicant(s)

STEVENS, RICK C.

Art Unit

2883

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/30/2007.
2. ☒ The allowed claim(s) is/are 1,2 and 5-20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Carl Johnson (Reg. No. 24,273) on 9/13/2007.

The application has been amended as follows:

In line 9 of claim 16, please insert the word --first-- in between the word "the" and the word "optical".

In line 11 of claim 16, please insert the word --first-- in between the word "the" and the word "optical".

### ***Response to Arguments***

2. Applicant's arguments, see page 2, in combination with the amendment to the claims filed 8/30/2007, with respect to the rejection of claims 1, 2, and 5-10 under 35 U.S.C. 112 have been fully considered and are persuasive. The rejection of claims 1, 2, and 5-10 under 35 U.S.C. 112 has been withdrawn.

3. Applicant's arguments see pages 2 and 3, in combination with the amendment to the claims filed 8/30/2007, with respect to the rejections of claims 11-20 have been fully considered and are persuasive. The rejections of claims 11-20 have been withdrawn.

### ***Allowable Subject Matter***

4. Claims 1, 2, and 5-20 are allowed.

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5. The following is an examiner's statement of reasons for allowance:
6. Claim 1 is allowable over the prior art of record because the latter, either alone or in combination, does not disclose nor render obvious a three part rotateable coupling connector comprising an alignment mounting sleeve, a first optical coupler mounted to the alignment sleeve, the first optical coupler having a first optical fiber and a second optical fiber, the second optical fiber rotatably mounted with respect to the first optical fiber and a second optical coupler mounted in the alignment sleeve, the second optical coupler having a third optical fiber and a fourth optical fiber, the fourth optical fiber being rotatably mounted with respect to the third optical fiber in combination with the rest of the claimed limitations.
7. Claims 2 and 5-10 depend from claim 1 and are allowable for the same reasons.
8. Claim 11 is allowable over the prior art of record because the latter, either alone or in combination, does not disclose nor render obvious an apparatus for optical coupling and optical decoupling comprising a first optical fiber having an angle cut terminus, a rotational joint located on an end of the first optical fiber, a second optical fiber having an angle cut terminus, a third optical fiber in optical communication with the end of the first optical fiber, a fourth optical fiber in optical communication with the second optical fiber and an alignment sleeve for holding the angle cut terminus of the first optical fiber and the angle cut terminus of the second optical fiber in rotational alignment with respect to each other in combination with the rest of the claimed limitations.
9. Claims 12-14 depend from claim 11 and are allowable for the same reasons.
10. Claim 15 is allowable over the prior art of record because the latter, either alone or in combination, does not disclose nor render obvious an apparatus for optical coupling and

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decoupling comprising a first optical lead having a butt connectable end, a first member holding the first optical lead, a third optical lead having a butt connectable end, a second member holding the butt connectable end of the third optical lead in rotational relationship with respect to the butt connectable end of the first optical lead, a second optical lead having a butt connectable end, a third member holding the second optical lead, a fourth optical lead having a butt connectable end, a fourth member holding the butt connectable end of the fourth optical lead in rotational relationship with respect to the butt connectable end of the second optical lead, and a transparent substance extending between the butt connectable end of the first optical lead and the butt connectable end of the second optical lead in combination with the rest of the claimed limitations.

11. Claim 16 is allowable over the prior art of record because the latter, either alone or in combination, does not disclose nor render obvious a method of twist free optical coupling comprising forming a rotational butt coupled joint in between a third optical lead and a first optical lead, forming a coupling angle face on the terminus of the first optical lead, forming a mating coupling angle face on the terminus of a second optical lead, forming a rotational butt coupled joint between the second optical lead and a fourth optical lead, and rotationally aligning the coupling angle cut face on the terminus of the first optical lead with the mating coupling face to thereby transit an optical signal therebetween while minimizing back reflection and twisting of the first optical lead in combination with the rest of the claimed limitations.

12. Claims 17-20 depend from claim 16 and are allowable for the same reasons.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

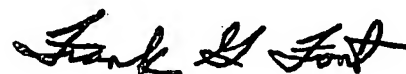
13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. *Iwakiri et al (US 4,893,889)* discloses first, second, third, and fourth optical fibers but does not disclose or render obvious rotational joints or alignment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derek L. Dupuis whose telephone number is (571) 272-3101. The examiner can normally be reached on Monday - Thursday 8:30am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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